

So what is a Kilowatt-Hour?



Electricity is measured in **kilowatt-hours (kWh)**. One kWh of energy is equal to 1000 watt hours and will power a 100 watt light bulb for 10 hours (100 watts x 10 hours = 1,000 watt-hours = 1 kWh).

One kilowatt-hour of electricity is enough to:

- watch television for 10 hours
- wash 12 pounds of laundry
- listen to the radio for 20 hours
- vacuum for an hour
- cook breakfast for a family of 4
- work on computer for 5-10 hrs

The electricity usage chart below is a great tool that may be helpful in providing ideas that can lower your energy consumption.

CATEGORY	DETAIL	ESTIMATED ENERGY USAGE
Air Conditioning/Cooling	Attic Fan	0.4 kWh/hr
	Ceiling Fan	0.075 kWh/hr
	Central (3 ton-12SEER)	3.0 kWh/hr
	Portable Fan	0.03 kWh/hr
	Whole House Fan	0.2 - 0.4 kWh/hr
	Window/Wall Unit (18kBtu) (240V)	1.8 kWh/hr
Heating	Baseboard Heater (Six Foot Unit) (250 w/foot)	1.5 kWh/hr
	Electric Furnace	10.5 kWh/hr w/fan
	Heat Pump Heat Strips	10.0 kWh/hr w/fan
	Heat Pump w/o Heat Strips (1.8 COP) – 1.5 Ton	2.93 kWh/hr
	Heat Pump w/o Heat Strips (1.8 COP) – 5.0 Ton	9.77 kWh/hr
	Portable Heater (1500W)	1.5 kWh/hr
Kitchen Appliances	Blender	0.4 kWh/hr
	Can Opener	0.1 kWh/hr
	Coffee Maker	0.12 kWh/brew
	Coffee Maker/Brew, Warmer On	0.4 kWh/hr
	Deep Fryer	1.5 kWh/hr
	Dishwasher, Energy Saver Cycle	0.5 kWh/load
	Dishwasher, Normal Cycle – Cold Water	1.0 - 2.17 kWh/load
	Oven, Electric Range	2.3 kWh/hr
	Oven, Electric Range/Self Cleaning	6.0 kWh/hr cleaning
	Oven, Electric Range/Surface	1-1.5 kWh/hr
	Oven, Microwave	0.12 kWh/5 min
	Toaster (2 slices)	0.04 kWh/use
	Toaster Oven	0.75 kWh/hr
Refrigerator/Freezer	Older Units	
	Freezer (manual defrost), 15 Cu/Ft	90.0 kWh/mo
	Refrigerator (frost-free), 15 Cu/Ft	50.0 kWh/mo
	Energy Star Units	
	Energy Star Refrigerator, 14 Cu/Ft	43.0 kWh/mo
	Energy Star Refrigerator (frost-free), 14 Cu/Ft	57.0 kWh/mo
	Energy Star Refrigerator (frost-free), 17 Cu/Ft	73.0 kWh/mo
	Energy Star Refrigerator (frost-free), 19 Cu/Ft	80.0 kWh/mo
	Energy Star Refrigerator (Side by Side) 21 Cu/Ft	123.0 kWh/mo
	Energy Star Refrigerator (frost-free) 24 Cu/Ft	102.0 kWh/mo
Energy Star Refrigerator (Side by Side) 25 Cu/Ft	132.0 kWh/mo	
Laundry (not incl water)	Cold Wash, Cold Rinse	0.3 kWh/load
	Warm Wash, Cold Rinse	1.9 kWh/load
	Hot Wash, Cold Rinse	2.8 kWh/load
	Warm Wash, Warm Rinse	3.5 kWh/load
	Hot Wash, Warm Rinse	4.5 kWh/load
	Ironing	1.0 kWh/hr
Water Heating (Electric)	Instantaneous (110 v 29 amp) at 1gpm 70°F	390 - 500 kWh/mo
	Instantaneous (240 v 50 amp) at 2.5 gpm 83°F	12 kWh/hr
	Water Pump	2.0 kWh/hr
Electronics	Television >50" Plasma	0.48 kWh/hr
	Television 40" - 49" Plasma	0.4 kWh/hr
	Television > 50" LCD	0.22 kWh/hr
	Television 40" - 49" LCD	0.15 kWh/hr
	Television 30" - 36" Tube	0.30 kWh/hr
	Recording Device – DVD	0.03 kWh/hr
	Recording Device – DVR	28.8 kWh/mo
	Recording Device – VCR	0.02 kWh/hr
	Gaming Device – Nintendo Wii	0.02 kWh/hr
	Gaming Device – PlayStation 3	0.21 kWh/hr
	Gaming Device – Xbox 360	0.15 kWh/hr
	Computer – Desktop	0.06 - 0.25 kWh/hr
	Computer – Laptop	0.02 - 0.05 kWh/hr
	Computer – Monitor – 17" CRT	0.08 kWh/hr
Computer – Monitor – 17" LCD	0.04 kWh/hr	
Radio/Stereo/CD Player	0.05 kWh/hr	

*Information Sources: U. S. Department of Energy (www.energy.gov); Silicon Valley Power (www.siliconvalleypower.com); Concordia Electric (www.concordiaelectric.com). Information provided is approximate and may vary based upon age of appliances/devices and usage.